

Custom Rigid Waveguide Sections



JMC1210

Straight Waveguide

JMC1220 / 1230

E or H-Bend Waveguide

JMC1240

Twist Waveguide

Rigid Waveguide Extensions

Made to order rigid waveguide extensions are available in WR-28 (R320) through WR-340 (R26) waveguide sizes. Manufactured from copper or aluminum waveguide with brass or aluminum flanges in required lengths and flange type combinations. E and H plane waveguide bends are supplied in a choice of formed sweep or mitre-casting waveguide style. Waveguide twists are manufactured with formed waveguide.

Waveguide extensions are finished with corrosion protection and exterior surfaces are painted black or white.

Waveguide extensions are available with the most common North American (EIA) and European (IEC) standard flange combinations. Flange dash numbers used for rigid waveguide extensions are the same as those used for our flexible waveguide products.

Waveguide sections are tested to full waveguide band, but performance optimization over narrower designated bands are available upon request.

Electrical Specifications

Add 0.03 to VSWR for Choke flanges

Waveguide Size		Frequency	Insertion loss		VSWR	
IEC	EIA	Full Operating Band GHz	Typical	Typical	Typical	Typical
R	WR		dB/100ft. (10m) Copper	dB/100ft. (10m) Aluminum	Straight	Single Bend or Twist
26	340	2.20-3.30	0.60 (0.19)	0.89 (0.29)	1.03	1.05
32	284	2.60-3.95	0.82 (0.27)	1.24 (0.41)	1.03	1.05
40	229	3.22-4.90	1.05 (0.34)	1.58 (0.52)	1.04	1.06
48	187	3.94-5.99	1.55 (0.51)	2.33 (0.76)	1.04	1.06
58	159	4.64-7.05	1.70 (0.56)	2.59 (0.85)	1.04	1.07
70	137	5.85-8.20	2.23 (0.73)	3.31 (1.09)	1.05	1.07
84	112	7.05-10.00	3.11 (1.02)	4.67 (1.53)	1.05	1.07
100	90	8.20-12.40	4.79 (1.57)	7.35 (2.41)	1.06	1.07
120	75	10.00-15.00	5.79 (1.90)	8.70 (2.85)	1.06	1.08
140	62	12.40-18.00	7.35 (2.41)	11.1 (3.63)	1.07	1.09
180	51	14.50-22.00	10.1 (3.30)	15.1 (4.96)	1.07	1.09
220	42	18.00-26.50	16.3 (5.34)	24.5 (8.03)	1.08	1.10
260	34	22.00-33.00	20.1 (6.58)	30.2 (9.90)	1.08	1.10
320	28	26.50-40.00	27.6 (9.06)	41.4 (13.6)	1.09	1.13

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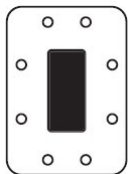
JMC1240

Twist Waveguide

Waveguide Flanges

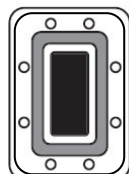
North American (EIA) and European (IEC) standard waveguide flanges are manufactured in-house and maintained in inventory reducing product lead time so we can respond quickly to market demands.

Rectangular Flanges



FLAT Contact

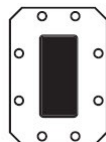
CPR -02
UDR -22



GROOVED Contact

CPRG -01
PDR -21

Number of holes for some flange styles depends on waveguide size

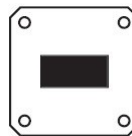


MINIATURE Contact

CMR -09,10,11
UER -30

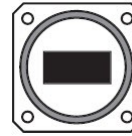
Square Flanges

WR28 to WR112 / R84 to R220



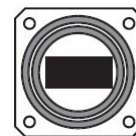
FLAT

COVER -03
UBR -23



GROOVED

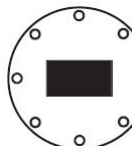
COVER -04
PBR -24



CHOKE -05
CBR -25

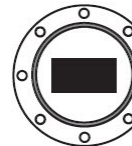
Round Flanges

WR137 to WR340 / R26 to R70



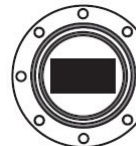
FLAT

COVER -06
UAR -26



GROOVED

COVER -07
PAR -27



CHOKE -08
CAR -28

Accessories

Hardware, fixing and clamping kit accessories are available for use with our flexible waveguide products. Consult our web site www.jupitermicrowave.com for accessory part numbers.

Flange Hardware Kits

Hardware kits are available for WR-28 (R320) through WR-340 (R26) waveguide flange sizes.



Kits include stainless steel screws, flat and lock washers, and depending on the flange type, either rectangular or O-ring silicone gaskets.

Flange Quick Disconnect Kits

Quick Disconnect clamp kits are available for WR-28 (R320) through WR-137 (R70) waveguide sizes and flange types.

Kits include nylon alignment screws, mating clamps, a retaining ring, and depending on the flange type, either rectangular or O-ring silicone gaskets.



Fast waveguide connection and easy installation.

Excellent choice for mobile and transportable applications.

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making connections



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Part Number Guide

JMC1220 -08 -E 90 -5 IN -4 IN -03 -04 -PB

Waveguide Type	Waveguide Size	Waveguide Finish	Length 1	Length 2	Flange 1	Flange 2	Bend or Twist Angle (degrees)	
							-E	-R
Straight Section	JMC1210	Iridite -R Painted Black -PB Painted White -PW	Unit Length inch IN mm MM	Unit Length inch IN mm MM			Blank for Straight WG	
E or H Sweep Bend Section	JMC1220						-E Plane Bend	
E or H Cast Bend Section	JMC1230						-H Plane Bend	
Twist Section	JMC1240						-R R-Left Hand Twist	
							-L L-Left Hand Twist	
<u>Standard</u>			North American (EIA)		Flange Type		Flange Type (IEC) European	
Copper WG	R26 / WR340 -340				CPRG - Grooved Contact	-01	-21	PDR - Rectangular Grooved
Brass flanges	R32 / WR284 -01				CPRF - Contact Flat	-02	-22	UDR - Rectangular Flat
	R40 / WR229 -02				Cover Flat - Square	-03	-23	UBR - Square Flat
	R48 / WR187 -03				Cover Grooved - Square	-04	-24	PBR - Square Grooved
	R58 / WR159 -04				Choke - Square	-05	-25	CBR - Square Choke
	R70 / WR137 -05				Cover F WR137 - Round	-06	-26	UAR70 - Round Plain
	R84 / WR112 -06				Cover G WR137 - Round	-07	-27	PAR70 - Round Grooved
	R100 / WR90 -07				Choke WR137 - Round	-08	-28	CAR70 - Round Choke
	R120 / WR75 -08				CMR - Standard Holes	-09		
	R140 / WR62 -09				CMR - Clear Holes	-10	-30	UER - Clear Holes
	R180 / WR51 -10				CMR - Tapped Holes	-11	-99	Special—Customer Specified
	R220 / WR42 -11							
	R260 / WR34 -12							
	R320 / WR28 -13							

Standard

Copper WG
Brass flanges

Special Request

Aluminium WG and flanges
add "A" after JMC12XX above

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